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Eric Lee Sparks

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Extension Program Leader and Coastal Ecology Specialist at Mississippi-Alabama Sea Grant

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EDUCATION

2014 **Ph.D., Marine Sciences**, University of South Alabama and Dauphin Island Sea Lab

2008 **B.S., Marine Biology**, Troy University

PROFESSIONAL EXPERIENCE

2015-present **Assistant Extension Professor of Estuarine and Wetland Ecology**
Mississippi State University

2015-present **Extension Program Leader and Coastal Ecology Specialist**
Mississippi-Alabama Sea Grant Consortium

2014-2015 **Senior Environmental Scientist**
Southwest Florida Water Management District

2014 **Postdoctoral Researcher**
Weeks Bay Foundation

2012-2014 **Project Manager**
Weeks Bay Foundation

2009-2011 **Head Teaching Assistant**
Dauphin Island Sea Lab

2008-2012 **Research Assistant**
Dauphin Island Sea Lab and University of South Alabama

EXTENSION AND RESEARCH PROGRAMS

Leader of the Coastal Conservation and Restoration Program (2015-present)

The Coastal Conservation and Restoration Program serves as the umbrella program for all of our sub-programs (listed below). Our mission is to put science into practice by providing coastal stakeholders with the knowledge they need to make sound environmental, economic, and resilient decisions. The process of gathering information and getting it to people that can use it involves Extension, applied research, outreach, and education activities. Our focus areas are broad and adapt to the current needs of stakeholders, but generally involve coastal conservation and restoration projects at local, state, regional, national, and international scales. Please visit the Coastal Conservation and Restoration Program website (<http://coastal.msstate.edu/ccr>) for more information about this program.

Leader of the Mississippi-Alabama Sea Grant Extension Program (2016-present)

The mission of the Mississippi-Alabama Sea Grant Consortium (MASGC) is to enhance the sustainable use and conservation of ocean and coastal resources to benefit the economy and environment in Alabama and Mississippi. To fulfill this mission, MASGC commits to

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interdisciplinary environmental scholarship and community-based natural-resource management. Please visit the Mississippi-Alabama Sea Grant website (<http://masgc.org/>) for more information about this program.

Leader of the Mississippi-Alabama Living Shorelines Program (2016-present)

Living shorelines is a term used to describe environmentally friendly shoreline stabilization techniques. Living shorelines are alternatives to hardened shoreline techniques, such as bulkheads and seawalls, which stabilize shorelines, while also providing the benefits of a natural shoreline. This program works directly with property owners, contractors, nurseries, and regulatory agencies to increase the knowledge base and streamline the processes associated with implementing living shoreline projects. Program activities include, but are not limited to, conducting property owner, contractor, and government agency workshops/trainings, producing guidebooks and extension publications, research to improve the site design process, and site evaluations.

Leader of the Mississippi Coastal Cleanup Program (2016-present)

Litter is an issue that impairs the environment, stormwater infrastructure, tourism, and industry along coastlines. The Coastal Cleanup Program was formed with the mission of preventing and removing litter from the coastal environment through education, outreach, research, and cleanup events. Please visit the Mississippi Coastal Cleanup website (<http://coastalcleanup.extension.msstate.edu/>) for more information about this program.

Leader of the Mississippi Master Naturalist Program (2015-present)

Lack of environmental knowledge often promotes poor stewardship of natural resources. Additionally, many environmentally conscious individuals are eager to help out through volunteer service, but these opportunities are often difficult to find. The Mississippi Master Naturalist Program was formed with the mission of developing an organization of knowledgeable volunteers to help promote conservation and management of Mississippi's natural resources through education, outreach, and service within their communities. Please visit the Mississippi Master Naturalist website (<http://masternaturalist.extension.msstate.edu/>) for more information about this program.

REFEREED JOURNAL PUBLICATIONS

Macy A, Sharma S, **Sparks EL**, Goff J, Heck KL, Jr., Johnson MW, Harper P, Cebrian J. 2017. Tropicalization of the barrier islands of the northern Gulf of Mexico: A comparison of herbivory and decomposition rates between smooth cordgrass (*Spartina alterniflora*) and black mangrove (*Avicennia germinans*). PLoS One (in review)

Siikamäki J, Krupnick A, Carollo C, Yoskowitz D, Cebrian J, Pollack J, **Sparks EL**. 2017. Valuation of Gulf of Mexico Coastal Ecosystems: A Five-State Choice Experiment. Resource and Energy Economics (in review)

Montemayor DI, **Sparks EL**, Cebrian J, Iribarne OO. 2017. Influence of grasshopper herbivory on nitrogen recycling in Northern Gulf of Mexico black needlerush salt marshes. Estuaries and Coasts (in press). MASGP-17-071. DOI: 10.1007/s12237-017-0322-2

Alberti J, Cebrian J, Alveraz F, Escapa M, Esquius KS, Fanjul E, **Sparks EL**, Mortazavi B, Iribarne OO. 2017. Nutrient and herbivore alterations cause uncoupled changes in producer

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diversity, biomass and ecosystem function, but not in overall multifunctionality. Scientific Reports 7: 2639. MASGP-17-050. DOI: 10.1038/s41598-017-02764-3

Thompson J, Kaiser A, **Sparks EL**, Shelton ME, Brunden E, Cherry JA, Cebrian J. 2016. Ecosystem-What? Public Understanding and Trust in Conservation Science and Ecosystem Services. *Frontiers in Science and Environmental Communication* 1:3: DOI: <http://dx.doi.org/10.3389/fcomm.2016.00003>

Sparks EL, Cebrian J. 2015. Effects of fertilization on grasshopper grazing in Northern Gulf of Mexico salt marshes. *Estuaries and Coasts* 38(3): 988-999. DOI: 10.1007/s12237-014-9858-6

Sparks EL, Cebrian J, Tobias CR, May C. 2015. Groundwater nitrogen processing in Northern Gulf of Mexico restored marshes. *Journal of Environmental Management* 150(2015): 206-215. DOI: 10.1016/j.jenvman.2014.11.019

Sparks EL, Cebrian J. 2015. Does bird removal affect grasshopper grazing on *Juncus roemerianus* (black needlerush) marshes? *Wetlands Ecology and Management* 23(6): 1083-1089. DOI: 10.1007/s11273-015-9438-y

Cherry JA, Ramseur GS, Jr., **Sparks EL**, Cebrian J. 2015. Testing sea-level rise impacts in tidal wetlands: an in situ approach. *Methods in Ecology and Evolution*. DOI: 10.1111/2041-210X.12441

Sparks EL, Cebrian J, Smith SM. 2014. Removal of fast flowing nitrogen from marshes restored in sandy soils. *PLoS ONE*. DOI: 10.1371/journal.pone.0111456

Sparks EL. 2014. Restoration effectiveness, nutrient filtration, and grazing in *Juncus roemerianus* (black needlerush) marshes. Ph. D. Dissertation. University of South Alabama, Mobile, AL.

Sparks EL, Cebrian J, Biber P, Sheehan KL, Tobias CR. 2013. Cost-effectiveness of two small-scale salt marsh restoration designs. *Ecological Engineering* 53(2013): 250-256. DOI: 10.1016/j.ecoleng.2012.12.053

EXTENSION AND OUTREACH PUBLICATIONS

Pace L, **Sparks EL**, Sartain AN, Wessel CC. 2018. Microplastics research initiates a greener future. *Mississippi LandMarks* magazine. Volume 14, Number 1, March 2018: 6-7. Link: http://www.dafvm.msstate.edu/landmarks/18/Vol14No1_Landmarks2018.pdf

Sparks EL. 2018. Embracing the dynamics of shorelines. Published April 5, 2018. Link: <http://masgc.org/news/article/embracing-the-dynamics-of-shorelines>

Sparks EL, Sartain AN, Baker B. 2018. Mississippi Coastal Cleanup Summary (2017). MSU Extension publication: P3188 (02-18); MASGP-18-004. Link: <http://extension.msstate.edu/publications/publications/mississippi-coastal-cleanup-2017>

Sparks EL, Sartain AN. 2018. Help Clean the Coast. MSU Extension publication: M2238 (01-18); MASGP-18-006. Link: <http://extension.msstate.edu/publications/miscellaneous/help-clean-the-beach-2017>

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Sartain AN, **Sparks EL**, Wessel CC. 2017. Studying microplastics in the Gulf. Water Log 37(4):10-12. Link: <http://masglp.olemiss.edu/waterlog/pdf/watlg37.4.pdf>

Sartain AN, Wessel CC, **Sparks EL**. 2017. Mississippi Coastal Cleanup. NOAA Marine Debris Program Blog. Published November 9, 2017. Link: <https://blog.marinedebris.noaa.gov/mississippi-coastal-cleanup>

Sparks EL, Barbour L. Check out a Mississippi Master Naturalist or Gardener flyer for libraries. MSU Extension Publication M2219 (09-17).

Sparks EL, Sartain AN. 2017. Mississippi Tide Tables (2018). MSU Extension Publication 850 (rev-2M-10-17). Mississippi-Alabama Sea Grant Publication 17-009. Link: <http://extension.msstate.edu/tides>

Martin SE, **Sparks EL**, Temple NA, Firth DC. 2017. Living shorelines: a permitting guide for Mississippi homeowners. MSU Extension publication: P3119 (09-17); MASGP-17-067. Link: <http://extension.msstate.edu/publications/publications/living-shorelines-permitting-guide-for-mississippi-homeowners>

Martin SE, **Sparks EL**, Temple NA, Firth DC. 2017. Living shorelines: a permitting guide for Alabama homeowners. MSU Extension publication: P3120 (10-17); MASGP-17-068. Link: <http://extension.msstate.edu/publications/publications/living-shorelines-permitting-guide-for-alabama-homeowners>

Sparks EL. 2017. Worried about erosion? Conserve or plant some salt marsh. Mississippi-Alabama Sea Grant Consortium Staff Blog. Published September 14, 2017. Link: <http://masgc.org/news/article/worried-about-erosion-conserve-or-plant-some-salt-marsh>

Baker BH, Wessel CC, **Sparks EL**. 2017. Citizen's guide to protecting the Mississippi Gulf Coast from marine debris. MSU Extension Publication P3133 (08-17); MASGP-17-026. Link: <http://extension.msstate.edu/publications/publications/citizen's-guide-protecting-the-mississippi-gulf-coast-marine-debris>

Martin SE, Girard Y, Temple NA, **Sparks EL**. 2017. Ongoing Research: Plotting the Course for Protecting Shorelines. Weeks Bay Foundation's Pelican Post: Summer 2017, Vol. 32, No. 2. Link: <https://weeksbay.org/about/pelican-post-archives/>

Sparks EL, Fischbach E. 2017. Help clean up the beach. MSU Extension Publication PM2187 (05-17); MASGP-17-027. Link: <https://extension.msstate.edu/help-clean-the-beach>

Sparks EL. 2017. Why you should slow down in no-wake zones. Mississippi-Alabama Sea Grant Consortium Staff Blog. Published May 4, 2017. Link: <http://masgc.org/news/article/why-you-should-slow-down-in-no-wake-zones>

Temple NA, **Sparks EL**, Martin SE, Firth DC, Amato J, Cebrian J. 2017. Living shorelines: adaptive strategies for changing tides. Weeks Bay Foundation's Pelican Post: Spring 2017, Vol. 32, No. 1. Link: <https://weeksbay.org/about/pelican-post-archives/>

Sparks EL. 2017. Cleaning up our coast. Extension Matters Magazine Volume 3, Number 1, March 2017: 30-32. Photos by Susan Collins-Smith, Kevin Hudson, Kat Lawrence.

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Fischbach E, **Sparks EL**, Sartain AN. 2017. Mississippi Coastal Cleanup Site Coordinator handbook. MSU Extension Publication P3064 (05-17); MASGP-17-015. Link: <http://extension.msstate.edu/publications/publications/mississippi-coastal-cleanup-site-coordinators-handbook>

Sparks EL, Fischbach E, Sartain AN. 2017. Mississippi Coastal Cleanup Volunteer handbook. MSU Extension Publication P3065 (05-17); MASGP-17-016. Link: <http://extension.msstate.edu/publications/publications/mississippi-coastal-cleanup-volunteers-handbook>

Sparks EL, Fischbach E, Sartain AN. 2017. Mississippi Coastal Cleanup Summary (2016). MSU Extension publication: P3061 (04-17); MASGP-17-014. Link: <http://extension.msstate.edu/publications/publications/mississippi-coastal-cleanup>

Martin SE, **Sparks EL**, Temple NA, Firth DC. 2017. Protection your property and the environment: A homeowner's guide to living shorelines in Alabama. MSU Extension publication: P3063 (04-17); MASGP-17-010. Link: <http://extension.msstate.edu/publications/publications/protecting-your-property-and-the-environment-homeowners-guide-living>

Martin SE, **Sparks EL**, Temple NA, Firth DC. 2017. Protection your property and the environment: A homeowner's guide to living shorelines in Mississippi. MSU Extension publication: P3062 (04-17); MASGP-17-011. Link: <http://extension.msstate.edu/publications/publications/protecting-your-property-and-the-environment-homeowners-guide-living-0>

Sparks EL. 2016. The scale and consequences of plastic pollution. Mississippi-Alabama Sea Grant Consortium Staff Blog. Published December 8, 2016. Link: <http://masgc.org/news/article/the-scale-and-consequences-of-plastic-pollution>

Collins-Smith S, **Sparks EL**. 2016. Volunteers collect tons of trash during cleanup. Mississippi State University Extension Service Online Feature Story. Published October 27, 2016. Link: <http://extension.msstate.edu/news/feature-story/2016/volunteers-collect-tons-trash-during-cleanup>

Schneider M, **Sparks EL**. 2016. Let's clean up the Coast. Mississippi-Alabama Sea Grant Consortium Staff Blog. Published October 7, 2016. Link: <http://masgc.org/news/article/lets-clean-up-the-coast>

Sparks EL. 2016. Mississippi Tide Tables (2017). MSU Extension Publication 850 (rev-12M-10-16). Mississippi-Alabama Sea Grant Publication 16-009. Link: <http://extension.msstate.edu/tides>

Burrage D, Nguyen P, Posadas B, **Sparks EL**. 2016. Gulf Coast Fisherman monthly newsletter. MSU Extension Publication. Link: <https://extension.msstate.edu/newsletters/gulf-coast-fisherman-newsletter>

Sparks EL. 2016. End-User Derived Research to Improve the Effectiveness, Sustainability, and Prevalence of Coastal Restoration Projects. NOAA NERRS Science Collaborative Fact Sheet. Link: <http://graham.umich.edu/activity/32639>

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Sparks EL. 2016. Hands-on education offered through the Mississippi Master Naturalist Program. Mississippi-Alabama Sea Grant Consortium Staff Blog. Published August 17, 2016. Link: <http://masgc.org/news/article/hands-on-education-offered-through-the-mississippi-master-naturalist-progra>

Barbour L, **Sparks EL**, Rohnke AT. 2016. Mississippi Master Naturalists: Experiencing Mississippi like never before. Extension Matters Magazine Volume 2, Number 2, May 2016: 34-35.

Sparks EL. 2016. Saving money and the environment using sustainable landscaping. Mississippi-Alabama Sea Grant Consortium Staff Blog. Published April 28, 2016. Link: <http://masgc.org/news/article/saving-money-and-the-environment-using-sustainable-landscaping>

Sparks EL, Rohnke AT. 2016. Get Kids into the Green: Connect your Children with the Great Outdoors. MSU Extension publication: M2111 (500-07-16); MASGP-16-020. Link: <https://extension.msstate.edu/sites/default/files/publications/miscellaneous/m2111.pdf>

Sparks EL, Rohnke AT. 2016. Mississippi Master Naturalist Certificate: F1125 (03-16).

Barbour L, **Sparks EL**, Rohnke AT. 2016. Getting into the Wild: Become a Mississippi Master Naturalist. MSU Extension publication: M2097 (2M-04-16); MASGP-16-017. Link: <http://extension.msstate.edu/publications/miscellaneous/get-the-wild-become-mississippi-master-naturalist>

Sparks EL, Cebrian J. 2016. Research helps landowners reduce erosion and support ecosystems. Mississippi LandMarks magazine. Volume 11, Number 4, January 2016: 10-11. Link: <http://extension.msstate.edu/news/feature-story/2016/research-helps-landowners-reduce-erosion-support-ecosystem>

Dunlap K, Berrio J, Rounds L, Schubert J, Sempier S, **Sparks EL.** 2015. A Short Guide to Identifying and Implementing Hydrologic Restoration Projects in the Gulf of Mexico. MASGP-15-037. Link: http://masgc.org/assets/uploads/publications/1163/15-037_guide_to_id_hydro.pdf

Dunlap K, Berrio J, Rounds L, Schubert J, Sempier S, **Sparks EL.** 2015. A Quick Guide to Finding Hydrologic Restoration Projects and their Benefits in the Gulf of Mexico. MASGP-15-042. Link: http://masgc.org/assets/uploads/publications/1163/15-042_final_quick_guide.pdf

Burrage D, Nguyen P, Posadas B, **Sparks EL.** 2015. Gulf Coast Fisherman monthly newsletter.

Sparks EL. 2015. Master Naturalist class has big plans for future service. Mississippi-Alabama Sea Grant Consortium Staff Blog. Published October 28, 2015. Link: <http://masgc.org/news/article/master-naturalist-class-has-big-plans-for-future-service>

Sparks EL. 2015. Five reasons to become a master naturalist. Mississippi-Alabama Sea Grant Consortium Staff Blog. Published July 7, 2015. Link: <http://masgc.org/news/article/five-reasons-to-become-a-master-naturalist>

Sparks EL. 2015. Coastal Wetland Restoration and Climate Change Research in Weeks Bay. Weeks Bay Foundation's Pelican Post: Spring 2015, Vol. 30, No. 2. Link: <https://weeksbay.org/about/pelican-post-archives/>

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Sparks EL. 2015. Shedding light on living shorelines lingo, project updates. Mississippi-Alabama Sea Grant Consortium Staff Blog. Published May 28, 2015. Link: <http://masgc.org/news/article/shedding-light-on-living-shorelines-lingo-project-updates>

GRANTS AND AWARDS

Current support:

- 2018-2022 U.S. Department of Commerce/NOAA/Mississippi-Alabama Sea Grant Consortium. Mississippi-Alabama Sea Grant Outreach Program – Mississippi Component. PI: **Sparks EL**, Co-PIs: Posadas B, Drymon JM. Total Funding: **\$769,132**.
- 2018-2019 Mississippi State University Extension Service. Extension Apprenticeship Program – Coastal restoration. PI: **Sparks EL**. Total Funding: **\$7,500**.
- 2018 MSU-MAFES Special Research Initiative. Development of a wave and current sensor for low energy, shallow coastal environments. PI: Linhoss AC, Co-PIs: Temple NA, **Sparks EL**. Total Funding: **\$49,800**.
- 2018 NOAA Marine Debris Program: National Marine Sanctuaries Foundation. Mississippi Coastal Cleanup Program. PI: **Sparks EL**, Co-PIs: Baker BH, Posadas B, Collins PA. Total Funding: **\$2,000**.
- 2018 National Sea Grant Program Visioning Initiative. Citizen Science Training Workshop. PI: **Sparks EL**, Co-PI: Sartain AN. Total Funding: **\$3,750**.
- 2017-2019 EPA Gulf of Mexico Program. Engaging the fishing community to remove marine debris and quantify impacts. PI: **Sparks EL**, Co-PIs: Posadas B, Wessel CC, Vu T. Total Funding: **\$299,968**; MSU Funding: **\$146,208**.
- 2017 Southeastern Conference Visiting Faculty Travel Grant Program. PI: **Sparks EL**. Total Funding: **\$1,428**.
- 2017-2018 Gulf Star Grant (via Gulf of Mexico Alliance). Plastic Free Gulf Coast. PI: Englebreston E, Co-PIs: **Sparks EL**, Grabowski K, McKellar C. Total and MSU Funding: **\$10,000**.
- 2017-2018 Gulf Star Grant (via Gulf of Mexico Alliance). Citizen Science Marine Debris Monitoring and Outreach. PI: **Sparks EL**, Co-PI: Wessel CC. Total Funding: **\$40,000**; MSU Funding: **\$34,802**.
- 2017 NOAA Marine Debris Program: National Marine Sanctuaries Foundation. Mississippi Coastal Cleanup Program. PI: **Sparks EL**, Co-PIs: Baker BH, Posadas B, Collins PA. Total Funding: **\$6,000**; MSU Funding: **\$6,000**.

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- 2017-2018 Mississippi State University Extension Service. Extension Apprenticeship Program. PI: **Sparks EL**. Total Funding: **\$7,500**.
- 2015-2018 NERRS Science Collaborative Grant Program. End-user derived research to improve the effectiveness, sustainability, and prevalence of coastal restoration projects. PI: **Sparks EL**, Co-PIs: Cebrian J, Collini RC, Haner J, Shelton ME, Phipps SW, Brunden E, Adams LG. Total Funding: **\$489,571**; MSU Funding: **\$405,269**.
- 2015-2018 EPA Wetlands Program. Reducing runoff pollution in coastal waters through marsh restoration: a decision support tool for stakeholders. PI: Cebrian J, Co-PI: **Sparks EL**. Total Funding: \$249,732, Match Funding: \$121,543; MSU Funding: **\$142,201**, MSU Match Funding: \$35,134.
- 2014-2018 U.S. Department of Commerce/NOAA/Mississippi-Alabama Sea Grant Consortium. Mississippi-Alabama Sea Grant Outreach Program – Mississippi Component. PI: **Sparks EL**, Co-PI: Posadas B. Total Funding: **\$769,132**.

Completed grants:

- 2016 Mississippi Research Consortium Working Group Program. Mississippi Storm and Flooding Ecosystem Responses-Coastal Environmental Evaluation and Coastal Management and Resilience. PIs: Biber PD, Pace N Co-PIs: **Sparks EL**, Petrolia D, Freeman M, Sempier T, Davis M, Wu W, Kulawardhana R, Ko JY, Ding Y, Showalter S. Total Funding: \$8,000; MSU Funding: **\$2,000**.
- 2016 NOAA/NGI Minority Internship Mentor Program. Coastal restoration research and outreach. PI: **Sparks EL**. Total Funding: **\$4,440**.
- 2016 Sam's Club Volunteerism Grant. Mississippi Coastal Cleanup. PI: **Sparks EL**. Total Funding: **\$1,000**.
- 2014-2016 Mississippi State University Extension Services Internal Grant Seed Program. Magnifying and Expanding the Mississippi Master Naturalist Program. PI: **Sparks EL**, Co-PI: Rohnke AT. **\$42,000**.
- 2012 US Fish and Wildlife Service. Restoration of *Juncus roemerianus* as a means to reduce nonpoint source pollution. Cebrian J, **Sparks EL**. \$25,000.
- 2010 Alabama Coastal Area Management Program (ACAMP). Nonpoint Source Pollution Control through Restoration of *Juncus roemerianus* Marshes. 2010. Cebrian J, **Sparks EL**. \$30,000.

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2010 Results Group. Potential Remediation of Hydrocarbon Surface Contamination in Saltmarsh Habitats Utilizing In-Situ Isolation Systems. Cebrian J, Moody RM, **Sparks EL**. \$25,000.

Awards and fellowships:

2017 Selected as winning design and team for the Mississippi Beach Outfalls Challenge. Team members include: Perkes D, Englebretson E, Schattin H, Goecker M, Blancher D, **Sparks EL**, Biber PD, Dillon KS, LaSalle M, Doll J. Link(s): <https://www.youtube.com/watch?v=dvo6Saz5iMg>; <http://beachoutfallschallenge.org/newsroom/blog-updates/winners-2/#sthash.2fbXd7LX.s5uyEk1x.dpbs>

2016 Outstanding Extension Grantsmanship Award. Mississippi State University.

2011 CERF Student Travel Award. \$235.

2008-2012 University of South Alabama Graduate Assistantship. Tuition assistantship. \$12,000.

2004-2008 Troy University Chancellor's Scholarship. Tuition scholarship. \$16,000.

2004-2008 Energen Scholarship. \$8,000.

2006-2007 Dauphin Island Sea Lab Summer Fellowship. \$8,000.

TEACHING

2018-present Marine Research Techniques Directed Independent Studies Course. Mississippi State University Department of Wildlife, Fisheries, and Aquaculture. Graduate level.

2018-present Coastal Extension Communication Directed Independent Studies Course. Mississippi State University Department of Wildlife, Fisheries, and Aquaculture. Graduate level.

2015-present Mississippi Master Naturalist Basic Training Course (Coastal Chapter)

2009-2011 Head Teaching Assistant, Dauphin Island Sea Lab, Dauphin Island, AL

2010 Teaching Assistant for Hurricanes of the Gulf Coast (Dr. Keith Blackwell), Dauphin Island Sea Lab, Dauphin Island, AL

2010 Teaching Assistant for Coastal Wetland Ecology (Dr. Lee Stanton), Dauphin Island Sea Lab, Dauphin Island, AL

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- 2010 Teaching Assistant for Marine Geology (Dr. Michael Gibson), Dauphin Island Sea Lab, Dauphin Island, AL
- 2009 Teaching Assistant for Coastal Geomorphology (Dr. Scott Douglass), Dauphin Island Sea Lab, Dauphin Island, AL
- 2009-2010 Teaching Assistant for Coastal Zone Management (Drs. George Crozier and Julien Lartigue), Dauphin Island Sea Lab, Dauphin Island, AL
- 2008-2010 Teaching Assistant for Dolphins and Whales (Dr. Keith Mullin), Dauphin Island Sea Lab, Dauphin Island, AL
- 2008-2009 Teaching Assistant for Marine Botany (Dr. Just Cebrian), Dauphin Island Sea Lab, Dauphin Island, AL

PROFESSIONAL AFFILIATIONS AND MEMBERSHIPS

- Association for the Sciences of Limnology and Oceanography
- Association of Natural Resource Extension Professionals
- Coastal and Estuarine Research Federation
- Gulf Estuarine Research Society
- Alliance of Natural Resource Outreach and Service Programs
- Society of Wetland Scientists
- Mississippi Environmental Education Alliance

PRESENTATIONS

Conference presentations:

Morris RL, Bilokovic DM, Bushek D, Cebrian J, Kibler KM, La Peyre MK, McCleanachan G, Shinn J, **Sparks EL**, Temple NA, Walters LJ, Webb BM, Swearer SE. 2018. Oysters on the front line: nature-based solutions for coastal defense. ECSA 57. Perth, WA, Australia. September 3-6.

Sparks EL, Temple NA, Martin SE, Firth DC, Palino GM, Cebrian J. Impacts of large-scale breakwaters on shoreline vegetation in high wave energy environments. National Conference on Ecosystem Restoration. New Orleans, LA. August 29.

Wyman T, **Sparks EL**, Fastring D. 2018. The Gulf Coast Healthy Communities Collaborative. One Health Symposium. Baton Rouge, LA. April 12.

Sartain AN, **Sparks EL**. 2018. Mississippi-Alabama Sea Grant's citizen science shoreline monitoring programs. National Sea Grant Citizen Science Visioning Meeting. Santa Barbara, CA. March 19.

Sparks EL, Blanchette B, Sartain AN, Wessel CC. 2018. Engaging citizen scientists to assess large scale microplastic distributions. Sixth International Marine Debris Conference. San Diego, CA. March 13.

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Blanchette A, **Sparks EL**, Sartain AN, Wessel CC. 2018. Engaging citizen scientists to assess large scale microplastic distributions. Gulf of Mexico Graduate Student Symposium. Dauphin Island, AL. March 2.

Martin SE, Cebrian J, Cherry JA, **Sparks EL**, Ramseur GS, Jr. 2017. Restored coastal wetlands maintain ecosystem services in rising seas. Coastal and Estuarine Research Federation Conference. Providence, RI. November 7.

Sparks EL, Temple NA, Martin SE, Firth DC, Palino GM, Cebrian J. 2017. Impacts of large-scale breakwaters on shoreline vegetation in high wave energy environments. Society of Ecological Restoration Southeast Chapter Annual Symposium. Ocean Springs, MS. October 19.

Sparks EL, Cebrian J, Shelton ME, Haner J, Collini RC, Brunden E, Phipps SW, Adams LG, Temple NA, Martin SE, Firth DC, Palino GM, Lucore A. 2017. End-user derived research to improve the effectiveness, sustainability, and prevalence of coastal restoration projects. NERRS Science Collaborative Advisory Board Meeting. Ann Arbor, MI. September 19.

Sparks EL. 2017. Marine debris funding opportunities through Sea Grant. Gulf of Mexico Alliance Marine Debris Cross-Team Initiative Meeting. Mobile, AL. August 31.

Sparks EL, Sartain AN, Wessel CC. 2017. Engaging citizen scientists in marine debris research and outreach. Gulf of Mexico Alliance Marine Debris Cross-Team Initiative Meeting. Mobile, AL. August 30.

Cherry JA, **Sparks EL**, Martin SE, Cebrian J, Ramseur GS, Jr. 2017. Restored marshes can maintain ecosystem services under sea-level rise. 7th World Conference on Ecological Restoration. Foz Do Iguassu, Brazil. August 29.

Temple NA, Cebrian J, Martin SE, **Sparks EL**, Firth DC. 2017. The effects of multiple environmental variables on the nutrient removal capacity of restored marshes. Annual Meeting of the Society of Wetland Scientists. San Juan, PR. June 5-8.

Sparks EL, Temple NA, Martin SE, Firth DC. 2017. Small-scale living shorelines. Climate Community of Practice Annual Meeting. Covington, LA. May 17.

Englebretson E, **Sparks EL**. 2017. Plastic Free Gulf Coast. Gulf of Mexico Alliance All Hands Meeting. Houston, TX. March 29.

Sparks EL, Wessel CC, Sartain AN. 2017. Engaging citizen scientists in marine debris research and outreach. Gulf of Mexico Alliance All Hands Meeting. Houston, TX. March 29.

Sparks EL. 2017. Estuarine ecology and restoration. Environmental Education Symposium at Crosby Arboretum. Picayune, MS. February 9.

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Temple NA, Daniel C. Firth, Cebrian J, **Sparks EL**, Martin SE. 2016. Effects of marsh platform slope, sediment type, sea-level rise, and initial planting density on nutrient retention in a restored marsh. Restore America's Estuaries Summit. New Orleans, LA. December 10-December 15.

Sparks EL, Cebrian J, Cherry JA, Ramseur GS, Jr. 2016. The effects of sea-level rise and planting density on restored marsh functionality. Bays and Bayous Symposium. Biloxi, MS. November 30-December 1.

Fischbach E, **Sparks EL**, Posadas B. 2016. Plastic pollution: perceptions, awareness, and willingness to pay for alternatives. Bays and Bayous Symposium. Biloxi, MS. November 30-December 1.

Firth DC, Temple NA, Martin SE, Cebrian J, **Sparks EL**. 2016. Faunal assemblages associated with living shorelines and implications for ecosystem functioning. Bays and Bayous Symposium. Biloxi, MS. November 30-December 1.

Temple NA, Firth DC, Cebrian J, **Sparks EL**, Martin SE. 2016. Effects of marsh platform slope, sediment type, sea-level rise, and initial planting density on nutrient retention in a restored marsh. Bays and Bayous Symposium. Biloxi, MS. November 30-December 1.

Martin SE, Cherry JA, **Sparks EL**, Cebrian J. 2016. Determining the drivers of plant community composition change in a restored marsh experiencing sea-level rise. Bays and Bayous Symposium. Biloxi, MS. November 30-December 1.

Sparks EL. 2016. Improving the effectiveness, sustainability, and prevalence of coastal restoration projects. NERRS Annual Meeting, Williamsburg, VA. November 13.

Sparks EL, Wessel CC, Willis L, Wilds M. 2016. Marine debris research and outreach through citizen-science. Gulf Estuarine Research Society and Society of Wetland Scientists Joint Meeting. Pensacola, FL. November 3-5.

Firth DC, Temple NA, Martin SE, Cebrian J, **Sparks EL**. 2016. Faunal assemblages associated with living shorelines and implications for ecosystem functioning. Gulf Estuarine Research Society and Society of Wetland Scientists Joint Meeting. Pensacola, FL. November 3-5.

Temple NA, Firth DC, Cebrian J, **Sparks EL**, Martin SE. 2016. Effects of marsh platform slope, sediment type, sea-level rise, and initial planting density on nutrient retention in a restored marsh. Gulf Estuarine Research Society and Society of Wetland Scientists Joint Meeting. Pensacola, FL. November 3-5. (*won first place student poster*).

Fischbach E, **Sparks EL**. 2016. Coastal Extension: Restoration, Living Shorelines, Marine Debris. NOAA/NGI Internship Symposium, Stennis Space Center, MS. August 5.

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Cherry JA, **Sparks EL**, Martin SE, Cebrian J, Ramseur GS, Jr. 2016. Testing the effects of initial planting density and sea-level rise on plant community structure in restored tidal marshes. Weeks Bay National Estuarine Research Reserve Symposium. Fairhope, AL. August 4.

Sparks EL, Cebrian J, Cherry JA, Ramseur GS, Jr. 2016. Impact of planting density and sea-level rise on nutrient removal in restored marshes and next steps identified by end-users. Weeks Bay National Estuarine Research Reserve Symposium. Fairhope, AL. August 4.

Cherry JA, **Sparks EL**, Martin SE, Cebrian J, Ramseur GS, Jr. 2016. The effects of initial planting density and sea-level rise on community structure and ecosystem function in restored tidal marshes. Society of Wetland Scientists Annual Meeting, Corpus Christi, TX. June 2.

Sparks EL, Wessel CC, Willis L, Wilds M. 2016. Engaging citizen scientists in microplastic research. NOAA/GOMA Marine Debris Meeting. Mobile, AL. May 25.

Sparks EL, Cebrian J. 2016. Improving water quality through cost-effective marsh restoration. Mississippi Water Resources Conference. Jackson, MS. April 5.

Macy A, Cebrian J, **Sparks EL**, Cherry JA, Osland MJ. 2016. Potential for persistence: marsh and mangroves under simulated rapid sea-level rise. Gulf of Mexico Graduate Student Symposium, Ocean Springs, MS. March 4-6.

Macy A, Cebrian J, Heck KL, Jr., Goff J, Sharma S, **Sparks EL**, Scheffel WA, Johnson MW. 2015. Influence of *Avicennia germinans* on Ecosystem Dynamics at the Edge of their Northern Limit. CERF conference, Portland, OR. November 8-12.

Sparks EL, Cebrian J, Cherry JA, Ramseur GS, Jr. 2015. The effects of sea-level rise and planting density on nitrogen removal in restored marshes. CERF conference, Portland, OR. November 8-12.

Sparks EL, Cebrian J, Shelton M, Haner J, Collini RC, Brunden E, Phipps SW, Adams LG. 2015. End-user derived research to improve the effectiveness, sustainability, and prevalence of coastal restoration projects. NERRS Annual Meeting, Mobile, AL. October 25-30.

Alberti JA, Cebrian J, Alvarez F, Escapes M, Esquius KS, Fanjul E, **Sparks EL**, Mortazavi B, Iribarne OO. 2015. Variable responses of ecosystem functions to Changes in benthic microalgae induced by nutrients and herbivorous snails. Fourth International Congress Ecosystem Services in the Neotropics: from research to action. Argentina, October 20.

Martin SE, Cherry JA, Constantin A, **Sparks EL**, Cebrian J. 2015. Sea-level rise and initial vegetative cover as drivers of plant community composition in restored tidal marshes. Society of Wetland Scientists Annual Meeting, Providence, RI. May 31-June 4.

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Macy A, Cebrian J, Heck KL, Jr., Goff J, Scheffel WA, Sharma S, **Sparks EL**, Byron D. 2015. Evidence for Shifts in Nutrient Transfer with Range Expansion of Black Mangrove *Avicennia germinans*. Southeastern Biogeochemistry Symposium, Atlanta, GA. March 28-29.

Sparks EL. 2015. Functionality and cost-effectiveness of different marsh planting designs. Gulf States Marine Fisheries Commission 65th Annual Spring Meeting. Fairhope, AL. March 17-19.

Macy A, Cebrian J, Heck KL, Jr., Goff J, Scheffel WA, Sharma S, **Sparks EL**, Byron D. 2014. Influence of *Avicennia germinans* on ecosystem dynamics at the edge of their northern limit. Bays and Bayous Symposium, Mobile, AL. December 2-4.

Cherry JA, Ramseur GS, Jr., **Sparks EL**, Cebrian J. 2014. Testing sea-level rise impacts in tidal wetlands: a new experimental approach. Joint Aquatic Sciences Meeting. Portland, OR. May 18-23.

Cebrian J, Heck KL, Jr., Goff J, Sharma S, **Sparks EL**, Macy A, Scheffel WA. 2013. Examining functional change from mangrove expansion into marshlands in the Northern Gulf of Mexico. CERF conference, San Diego, CA. November 3-7.

Sparks EL, Cebrian, J, Tobias CR, Biber PD, Sheehan KL. 2013. Cost-effectiveness of two small-scale salt marsh restoration designs for vegetative growth and nutrient filtration capability. CERF conference, San Diego, CA. November 3-7.

Dean J, **Sparks EL**, Woodrey MS, Cebrian J, Boettcher AA. 2013. Herbivore pressure driving forces across the Northern Gulf of Mexico salt marshes. 20th annual USA Faculty Development Council Spring Research Forum, Mobile, AL. March 18-22.

Sparks EL, Cebrian J, Tobias CR. 2013. Nutrient filtration capability of small-scale salt marsh restoration designs. ASLO Aquatic Sciences Meeting, New Orleans, LA. February 17-22.

Sparks EL, Cebrian J, Biber PD, Sheehan KL, Tobias CR. 2012. Cost-effectiveness of two small-scale salt marsh restoration designs. Bays and Bayous Symposium, Biloxi, MS. November 14-15.

Sharma S, **Sparks EL**, Goff J, Heck KL, Jr., Scheffel WA, Johnson MW, Cebrian J. 2012. Potential effects of black mangroves (*Avicennia germinans*) on structural and functional attributes of local saltmarsh grasses. Bays and Bayous Symposium, Biloxi, MS. November 14-15.

Sparks EL, Cebrian J, Biber PD, Sheehan KL, Tobias CR. 2012. Success, functionality and cost-effectiveness of two small-scale salt marsh restoration designs. GERS Meeting, Dauphin Island, AL. November 8-9.

Sharma S, **Sparks EL**, Goff J, Heck KL, Jr., Scheffel WA, Johnson MW, Cebrian J. 2012. Potential effects of black mangroves (*Avicennia germinans*) on structural and functional attributes of local saltmarsh grasses. GERS Meeting, Dauphin Island, AL. November 8-9.

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Dean J, **Sparks EL**, Woodrey MS, Cebrian J, Boettcher AA. 2012. Variations in herbivore pressure across the Northern Gulf of Mexico salt marshes. 73rd Annual Meeting of the Association of Southeastern Biologists. April 4-7. Athens, GA.

Sparks EL, Tobias CR, Cebrian J. 2011. Nutrient Filtration Effectiveness of Two Salt Marsh Restoration Designs. CERF Conference, Daytona Beach, FL. November 6-10.

Kerner SM, **Sparks EL**, Watson K, Cebrian J. 2011. Gulf Coast Salt Marshes: Does Eutrophication = More Grazing? CERF Conference, Daytona Beach, FL. November 6-10.

Dean J, **Sparks EL**, Woodrey MS, Boettcher AA. 2011. Does Herbivore Pressure and Diversity Vary Across Northern Gulf of Mexico Salt Marshes? CERF Conference, Daytona Beach, FL. November 6-10.

Cebrian J, **Sparks EL**, Tobias CR. 2011. Colonization and Functionality of Two Black Needlerish (*J. roemerianus*) Marsh Restoration Designs. Inaugural Grand Bay National Estuarine Research Reserve Research Symposium. October 14. Moss Point, MS.

Dean J, **Sparks EL**, Woodrey MS, Cebrian J, Boettcher AA. 2011. Does herbivore pressure and diversity vary across Northern Gulf of Mexico salt marshes? Inaugural Grand Bay National Estuarine Research Reserve Research Symposium. October 14. Moss Point, MS.

Sparks EL, Kerner SM, Watson K, Cebrian J. 2011. Bottom-up and Top-down Interactions in Northern Gulf of Mexico Salt Marshes. Inaugural Grand Bay National Estuarine Research Reserve Research Symposium. October 14. Moss Point, MS.

Dean J, **Sparks EL**, Woodrey MS, Boettcher AA. 2011. Variation in Herbivore Pressure across Northern Gulf of Mexico Salt Marshes. Marine Benthic Ecology Meeting. Mobile, AL. March 16-20.

Sparks EL, Cebrian J. 2011. Grazing Responses to Fertilization and Effects on Black Needlerush (*Juncus roemerianus*). Marine Benthic Ecology Meeting, Mobile, AL. March 16-20.

Sheryl Torr-Brown, Mark Roser, Moody RM, Cebrian J, **Sparks EL**, Amy Langston, Katherine Phillips, Marcus Gay. 2011. Rapid Assessment of In-Situ Isolation Systems for Marsh Environments. National Council for Science and the Environment 11th National Conference for Science, Policy, and the Environment. Washington, DC. January 19-21.

Dean J, **Sparks EL**, Woodrey MS, Boettcher AA. 2010. Differences in Herbivore Pressure Across Northern Gulf of Mexico Salt Marsh Habitats. Bays and Bayous Symposium, Mobile, AL. December 1-2.

Sparks EL, Cebrian J, Sheehan KL. 2010. *Juncus roemerianus* Morphology and Colonization in Two Marsh Restoration Designs. Bays and Bayous Symposium, Mobile, AL. December 1-2.

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Sparks EL, Langston A, Phillips K, Moody RM, Cebrian J, Woodrey MS. 2010. Tidal Flushing through ISIS Oil Exclusion Cylinders. Collaborative Scientific Research Opportunities Relative to the Gulf Oil Spill, New Orleans, LA. November 1-2.

Sparks EL, Tobias CR, Cebrian J. 2010. Groundwater Nitrate Assimilation into Restored *Juncus roemerianus* and Associated Fauna. Marine Benthic Ecology Meeting, Wilmington, NC. March 10-13.

Sparks EL, Cebrian J, Sheehan KL. 2009. Evaluation of Two Different Restoration Designs for a *Juncus roemerianus* Marsh. CERF Conference, Portland, OR. November 1-4.

Sparks EL. 2008. Filtration of Nutrient Pollution by Restored Black Needlerush. Soil and Water Conservation Society Meeting, Grand Bay National Estuarine Research Reserve, August 1.

Seminars and guest lectures:

Sparks EL. 2018. Improving the effectiveness of shoreline restoration and conservation. University of Florida's Water, Wetland, and Watershed Seminar Series. Gainesville, FL. January 24.

Sparks EL, Temple NA, Martin SE, Firth DC, Palino GM, Lucore A, Cebrian J. 2017. Improving the effectiveness of coastal restoration. Gulf Coast Research Lab's Fall Seminar Series. Ocean Springs, MS. October 26.

Sparks EL. 2017. Impacts of sea-level rise on the natural environment. League of Women Voter's Seminar Series. Mobile, AL. October 25.

Sparks EL. 2017. Local marine debris issues and projects. University of Southern Mississippi's Sustainability Seminar. Long Beach, MS. October 17.

Sparks EL. 2017. Shoreline enhancement and restoration projects. Auburn's Landscape Design Group field trip. Dauphin Island, AL. October 3.

Sparks EL. 2017. Coastal erosion and living shorelines. MGCCC Phi Theta Kappa seminar. Biloxi, MS. September 29.

Sparks EL. 2017. Living shorelines, marine debris, and Master Naturalists: How extension improves environmental stewardship. Gulf Coast Research Lab's Science Café. Ocean Springs, MS. August 29.

Sparks EL, Temple NA, Martin SE, Firth DC, Palino GM, Lucore A. 2017. Coastal Research and Extension. EPA Gulf of Mexico Program Science Seminar. Gulfport, MS. August 1.

Sparks EL. 2017. Living shorelines: a tool for a changing climate. Guest lecture for Florida Atlantic University undergrad/grad course titled: Sea level rise and society. Boca Raton, FL. July 18.

Sparks EL. 2017. Marsh restoration ecology, techniques, and evaluation. Guest lecture for Dauphin Island Sea Lab undergrad/grad course titled: Coastal Restoration Ecology. Fairhope, AL. June 12.

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Sparks EL. 2017. Customer perceptions of green practices in restaurants. University of South Alabama's Hospitality and Tourism Management Club. Mobile, AL. April 27.

Cebrian J, Anton A, Christiaen B, Gamble R, Sharma S, **Sparks EL.** 2016. Securing coastal ecosystem functionality in the Anthropocene. University of Alabama Biological Sciences Seminar Series. Tuscaloosa, AL. November 11.

Cebrian J, Anton A, Christiaen B, Gamble R, Sharma S, **Sparks EL.** 2016. Securing coastal ecosystems functionality in the Anthropocene. V Simposio Internacional De Ciencias Del Mar. Alicante, Spain. July 21.

Sparks EL. 2016. A Path to an Extension Career. Dauphin Island Sea Lab's Alumni Seminar Series. Dauphin Island, AL. April 15.

Sparks EL, Dean J, Boettcher AA, Cebrian J, Woodrey MS. 2011. Distribution and controls of grazing by salt marsh grasshoppers. Mississippi Department of Marine Resources Public Science Seminar. Biloxi, MS, October 30.

Workshop, webinar, and training presentations:

Sparks EL, Martin SE, Temple NA. 2018. A roadmap to living shoreline projects. Little Lagoon Preservation Society Meeting, Gulf Shores, AL. April 25.

Sparks EL. 2018. Common challenges for living shoreline implementation. NAS - Understanding the challenges of implementing green infrastructure webinar. Biloxi, MS. March 23.

Posadas B, Chang S, Drymon JM, **Sparks EL.** 2018. Research and Extension in Seafood and Aquaculture. CREC Advisory Committee Meeting. Ellisville, MS. February 27.

Sparks EL. 2018. Examples of local ecosystem service assessments. Mississippi Coastal Ecosystem Services Workshop. Moss Point, MS. January 18.

Sartain AN, **Sparks EL.** 2018. Microplastic sampling and citizen science training. Apalachicola National Estuarine Research Reserve. Apalachicola, FL. January 10.

Sparks EL, Sartain AN. 2017. Mississippi Coastal Cleanup Extension Program. Mississippi State University In-Service training. Biloxi, MS. December 19.

Sparks EL, Martin SE, Temple NA, Firth DC, Palino GM, Cebrian J. 2017. Project updates on NERRS Science Collaborative and EPA Wetlands projects. Weeks Bay Management Application Team meeting. Fairhope, AL. December 7.

Firth DC, **Sparks EL.** 2017. Faunal assemblages associated with living shorelines and implications for high-wave energy ecosystems. Teen Sci-Café at Ocean Springs Library. Ocean Springs, MS. December 7.

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Sparks EL, Posten M. 2017. Training your staff on watershed and environmental stewardship. Gulf Coast Outpost Business Summit. Gulfport, MS. November 29.

Sartain AN, **Sparks EL**. 2017. Mississippi Coastal Cleanup Site Captain Training. MSU Coastal Research and Extension Center. Biloxi, MS. November 14.

Sartain AN, **Sparks EL**. 2017. Mississippi Coastal Cleanup Site Captain Training. MSU Coastal Research and Extension Center. Biloxi, MS. November 13.

Firth DC, **Sparks EL**. 2017. Faunal assemblages associated with living shorelines and implications for high-wave energy ecosystems. Teen Sci-Café at Ocean Springs Library. Ocean Springs, MS. November 6.

Temple NA, **Sparks EL**. 2017. How to construct wave sensors and collect wave data. MGCCC Phi Theta Kappa community project. Biloxi, MS. November 3.

Sartain AN, **Sparks EL**. 2017. Mississippi Coastal Cleanup Site Captain Training. MSU Hancock County Extension Office. Bay St. Louis, MS. October 16.

Sparks EL, Sartain AN. 2017. Mississippi Coastal Cleanup Site Captain Training. MGCCC Estuarine Education Center. Gautier, MS. October 13.

Sartain AN, **Sparks EL**. 2017. Mississippi Coastal Cleanup Site Captain Training. MSU Coastal Research and Extension Center. Biloxi, MS. October 12.

Sparks EL. 2017. Living shoreline project and training opportunities for Camp Wilkes. Camp Wilkes Board Meeting. Biloxi, MS. September 18.

Sparks EL, Sartain AN, Wessel CC. 2017. Engaging citizen scientists in marine debris research and outreach. U.S. EPA's Mississippi Environmental Education Training. Biloxi, MS. August 23.

Sparks EL, Temple NA, Martin SE, Firth DC. 2017. Living shorelines in your community. American Planning Association's ABCs of Community Flood Mitigation Workshop. Biloxi, MS. August 11.

Sartain AN, **Sparks EL**. 2017. Microplastic sampling and citizen science training. Grand Bay National Estuarine Research Reserve. Moss Point, MS. August 9.

Palino GM, **Sparks EL**. 2017. Mapping and spatial analysis with qGIS. NOAA Disaster Response Center. Mobile, AL. August 2.

Sartain AN, **Sparks EL**, Wessel CC. 2017. Marine debris in the Gulf of Mexico. Plastics, Prescription Drugs and Chemical Pollutants Workshop. Long Beach, MS. July 18.

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Sartain AN, **Sparks EL**. 2017. Microplastic sampling and citizen science training. Barataria – Terrebone National Estuary Program. Grand Isle, LA. July 11.

Sparks EL, Martin SE, Temple NA, Firth DC, Palino GM, Cebrian J. 2017. Project updates on NERRS Science Collaborative and EPA Wetlands projects. Weeks Bay Management Application Team meeting. Fairhope, AL. June 29.

Wessel CC, Sartain AN, **Sparks EL**. 2017. Marine debris in the Gulf of Mexico. Plastics, Prescription Drugs and Chemical Pollutants Workshop. Long Beach, MS. June 16.

Sartain AN, Wessel CC, **Sparks EL**. 2017. Microplastic sampling and citizen science training. Master Naturalist citizen scientists. Biloxi, MS. May 25.

Sparks EL, Temple NA, and Martin SE. 2017. Natural erosion control in Little Lagoon. Little Lagoon Preservation Society's quarterly meeting. Gulf Shores, AL. April 20.

Sparks EL. 2017. Natural resource educational tool training. Mississippi Master Naturalist and Gardener Program. Biloxi, MS. April 18.

Wessel CC, **Sparks EL**, Sartain AN. 2017. Microplastic sampling and citizen science training. Apalachicola National Estuarine Research Reserve. Apalachicola, FL. April 10.

Wessel CC, **Sparks EL**, Sartain AN. 2017. Microplastic sampling and citizen science training. Marine Resources Development Foundation. Key Largo, FL. April 7.

Wessel CC, **Sparks EL**, Sartain AN. 2017. Microplastic sampling and citizen science training. Charlotte Harbor National Estuary Program. Punta Gorda, FL. April 6.

Wessel CC, **Sparks EL**, Sartain AN. 2017. Microplastic sampling and citizen science training. Nature's Academy. St. Petersburg, FL. April 4.

Wessel CC, **Sparks EL**, Sartain AN. 2017. Microplastic sampling and citizen science training. Nature Coast Biological Station. Cedar Key, FL. April 3.

Sparks EL, Posadas B, Nguyen P. 2017. Mississippi and Alabama fisheries updates and issues. Gulf State's Marine Fisheries Commission Annual Spring Meeting. Gulfport, MS. March 15.

Sparks EL, Martin SE, Temple NA, Firth DC. 2017. Protecting your property and the environment: a homeowner's guide to living shorelines in Mississippi. Gulf of Mexico Coastal Training Program. Biloxi, MS. March 7.

Posadas B, **Sparks EL**. 2017. Research and Extension in Seafood and Aquaculture. CREC Advisory Committee Meeting. Biloxi, MS. February 28.

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Sparks EL, Wessel CC. 2017. Citizen science microplastic sampling training – beach portion. Flagler County Extension Office, Bunnell, FL. February 14.

Sparks EL, Temple NA, Martin SE. 2017. An alternative to bulkheads at Camp Wilkes. Camp Wilkes board meeting. Biloxi, MS. February 13.

Sparks EL, Martin SE, Temple NA, Firth DC, Cebrian J. 2016. Protecting your property and the environment: a homeowner's guide to living shorelines in Alabama. Gulf of Mexico Coastal Training Program. Fairhope, AL. December 8.

Sparks EL, Martin SE, Temple NA, Firth DC, Cebrian J. Project updates on NERRS Science Collaborative and EPA Wetlands projects. Weeks Bay Management Application Team meeting. Fairhope, AL. November 29.

Sparks EL, Fischbach E. 2016. Mississippi Coastal Cleanup Zone Captain Training. Hancock County Extension Office. Bay St. Louis, MS. October 17.

Sparks EL, Fischbach E. 2016. Mississippi Coastal Cleanup Zone Captain Training. Mississippi Gulf Coast Community College Estuarine Education Center. Gautier, MS. October 13.

Sparks EL, Fischbach E. 2016. Mississippi Coastal Cleanup Zone Captain Training. Harrison County Extension Office. Gulfport, MS. October 5.

Sparks EL, Fischbach E. 2016. Mississippi Coastal Cleanup Zone Captain Training. Coastal Research and Extension Center. Biloxi, MS. October 4.

Sparks EL, Rohnke AT. 2016. Mississippi Master Naturalist Program Website Training. Advanced Training. Biloxi, MS. August 25.

Sparks EL. 2016. Alabama Living Shorelines: An Educational Tour for Decision – Makers. Co-Sponsored by Mississippi-Alabama Sea Grant Consortium, Mobile Bay National Estuary Program, The Nature Conservancy, CSI Media Consultants, LLC. Fairhope, AL. June 27.

Sparks EL, Martin SE, Temple NA, Firth DC, Cebrian J. Project updates on NERRS Science Collaborative and EPA Wetlands projects. 2016. Weeks Bay Management Application Team meeting. Fairhope, AL. March 16.

Sparks EL. 2016. Coastal ecology and restoration. National Alliance of Women in Construction meeting, Biloxi, MS. February 25.

Sparks EL. 2015. Creation and evaluation of marshes. Grand Bay NERR Blue Carbon Workshop: A Management Tool for Conservation and Restoration of Coastal Wetlands, Moss Point, MS. September 10.

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Sparks EL. 2015. Estuaries. Biloxi school district in-service elementary training, Biloxi, MS. August 3.

Sparks EL, Cebrian J. 2014. Wetland Carbon Sequestration Science. Carbon Market Credits and Conservation Benefits conference. Fairhope, AL. September 26.

Cherry JA, Cebrian J, Ramseur GS, Jr., **Sparks EL.** 2013. Using Experimental Weirs to Test the Impacts of Sea-Level Rise on Marsh Ecosystem Function. Gulf of Mexico Foundation International Integration Workshop on Sea-Level Rise. Merida, Yukatan. October 21-23.

Sparks EL, Tobias CR, Cebrian J. 2011. Restored marshes as a means to reduce nutrient loading into coastal systems. Grand Bay NERR Stormwater Workshop. Moss Point, MS. August 24.

Outreach presentations:

Sartain AN, **Sparks EL.** 2018. The Mississippi Coastal Cleanup Program. Tern Fest. Gulfport, MS. May 5.

Englebretson E, **Sparks EL.** 2018. Plastic Free Gulf Coast – Mockingbird Cafe. Bay St. Louis Night Market. Bay St. Louis, MS. April 27.

Sparks EL, Martin SE, Sartain AN, Temple NA. 2018. Living shorelines and marine debris. Weeks Bay Foundation's Bald Eagle Bash. Fairhope, AL. April 21.

Sartain AN, **Sparks EL.** 2018. The Mississippi Coastal Cleanup Program. MS Department of Marine Resource's Celebrate the Gulf event. Pass Christian, MS. April 7.

Sparks EL, Prychitko S, Walker J. 2018. The Mississippi Master Naturalist Program. MS Department of Marine Resource's Celebrate the Gulf event. Pass Christian, MS. April 7.

Sparks EL. 2017. Protecting your property and the environment with living shorelines. Ocean Springs Rotary Club meeting. Ocean Springs, MS. November 15.

Baker BH, **Sparks EL.** 2017. The Mississippi Coastal Cleanup Program. MSU Department of Wildlife, Fisheries, and Aquaculture advisory board meeting. Starkville, MS. November 10.

Rohnke AT, **Sparks EL.** 2017. The Mississippi Master Naturalist Program. MSU Department of Wildlife, Fisheries, and Aquaculture advisory board meeting. Starkville, MS. November 10.

Sparks EL. Mississippi Coastal Cleanup. 2017. Grand Bay National Estuarine Research Reserve's Estuaries Day. Moss Point, MS. September 30.

Fischbach E, Davis C, **Sparks EL.** 2017. Marine debris and Coastal Cleanup. NRCS Harrison County Field Day. Gulfport, MS. September 28.

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Perkes D, Goecker M, Blancher D, Doll J, **Sparks EL**, Biber PD, Dillon KS, LaSalle M, Schattin H, Englebretson E. 2017. Team MMMM Beach Outfall Design. Beach Outfalls Challenge Showcase. Long Beach, MS. June 28.

Sartain AN, **Sparks EL**. 2017. Plastics in our Mississippi sound. Marine Debris and Coastal Cleanup Presentation. Gulfport, MS. June 28.

Perkes D, Englebretson E, Schattin H, Goecker M, Blancher D, **Sparks EL**, Biber PD, Dillon KS, LaSalle M, Doll J. 2017. Team MMMM Beach Outfall Design Challenge Submission. Gulf Coast Community Design Studio's Friday Morning Serial. Biloxi, MS. May 19.

Martin SE, Temple NA, **Sparks EL**. 2017. Living Shorelines: A natural alternative to bulkheads. Weeks Bay Foundation's Bald Eagle Bash. Fairhope, AL. April 22.

Sparks EL. 2017. Coastal Extension. Mississippi Department of Environmental Quality and Mississippi State University RESTORE meeting. Starkville, MS. March 6.

Sparks EL, Hughes G, Drackett P. 2017. Sand County Almanac readings and Green Fire film discussion. Aldo Leopold Day at Crosby Arboretum. Picayune, MS. February 25.

Sparks EL. 2016. An introduction to the Sea Grant, Master Naturalist, and Coastal Environmental Extension Programs. Mississippi State University Coastal and Research Center's Holiday Open House. Biloxi, MS. December 6.

Sparks EL. 2016. The Mississippi Master Naturalist Program. Ocean Springs Lions Club Meeting. Ocean Springs, MS. August 11.

Sparks EL. 2016. How to Become a Mississippi Master Naturalist. Gulf Coast Community Design Studio's Friday morning serial. Biloxi, MS. July 29.

Sparks EL. 2016. Coastal ecology and restoration. Gulf Coast Community Design Studio's Friday morning serial. Biloxi, MS. March 4.

Sparks EL, Rohnke AT. 2016. How to get involved in the Mississippi Master Naturalist Program. Pine Woods Audubon Society chapter meeting, Hattiesburg, MS. March 3.

Sparks EL, Rohnke AT. 2016. Mississippi Master Naturalist Program. MSU Advisory Council Meeting, Biloxi, MS. February 23.

Sparks EL. 2015. Coastal Environmental Extension Programs. Mississippi State University Coastal and Research Center's Holiday Open House. Biloxi, MS. December 10.

Sparks EL, Wessel CC. 2015. Microplastics on the coast. Mississippi Coastal Cleanup, Coastal Mississippi. October 17.

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Sparks EL. 2015. Mississippi Master Naturalist Program. Ornamental Horticulture Field Day, Poplarville, MS. October 1.

Sparks EL. 2015. Estuarine habitats and animals. Crosby Arboretum's Wildlife Day. Picayune, MS. April 29.

Sparks EL. 2011. Salt Marshes: More than Mud and Muck. Dauphin Island Sea Lab Estuarium Boardwalk Talk. Dauphin Island, AL. March 2.

Youth education presentations:

Sparks EL, Sartain AN. 2018. How to use physics to find microplastics. Trent Lott Academy's Mad Scientist Day. Pascagoula, MS. April 20.

Sartain AN, Jefferson A, **Sparks EL.** 2018. Marine debris. 4H Day Camp. Biloxi, MS. April 2.

Sparks EL. 2018. How to measure and prevent marine debris. Girl Scout Teen Camporee. Wiggins, MS. March 24.

Blanchette A, **Sparks EL.** 2018. Local estuaries: importance, problems, and solutions. Gautier High School guest lecture. Gautier, MS. February 23.

Sparks EL. 2017. Water quality and marine debris. Anniston Avenue Elementary guest presentation. Gulfport, MS. October 31.

Sartain AN, **Sparks EL.** 2017. Estuarine and marine animals. Popp's Ferry Elementary's Annual Mississippi Day. Biloxi, MS. May 18.

Sparks EL, Sartain AN. 2017. Adaptations of estuarine and marine animals. Anniston Elementary Field Day at the MSU Coastal Research and Extension Center. Biloxi, MS. May 5.

Sparks EL. 2017. Estuarine and marine ecology. Trent Lott Academy's Mad Scientist Day. Pascagoula, MS. April 24.

Sparks EL, Sartain AN. 2017. A career in Marine Biology. Ocean Springs Middle School job shadowing. Biloxi, MS. March 3.

Temple NA, Martin SE, **Sparks EL.** 2017. Estuaries and food webs. Foley Middle School STEM Club meeting. Foley, AL. February 22.

Sartain AN, **Sparks EL.** 2017. So you want to be a Marine Biologist? Pass Road Elementary Career Day. Biloxi, MS. January 18.

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Sparks EL. Estuaries and Marine Debris. 2016. Girl Scout Wonders of Water Journey badge certification program. Biloxi, MS. November 29.

Sparks EL. 2016. Estuaries. NRCS Harrison County Field Day. Gulfport, MS. September 29.

Sparks EL. 2016. Estuaries. NRCS Harrison County Field Day. Gulfport, MS. September 28.

Sparks EL, Fischbach E. 2016. Mississippi Coastal Cleanup. Anniston Avenue Elementary School. Gulfport, MS. August 26.

Sparks EL. 2016. Fauna of Coastal Mississippi. Popp's Ferry Elementary Annual Mississippi Day. Biloxi, MS. May 20.

Sparks EL. 2016. Animals of MS Sound. Anniston Elementary Field Day at Coastal Research and Extension Center. Biloxi, MS. April 29.

Sparks EL. 2015. Coastal Restoration. Ocean Springs School District's Earth Explorations Day, Ocean Springs, MS. November 20.

Sparks EL. 2015. Native Plants and Animals of Coastal Mississippi. North Bay Elementary Natives Lecture Series. Biloxi, MS. September 27.

Sparks EL. 2015. Mississippi Estuaries. Popp's Ferry Elementary's Mississippi Day. Biloxi, MS. May 18.

SERVICE AND SYNERGISTIC ACTIVITIES

Manuscript Reviewer for:

- *Environmental Management*
- *Estuarine and Shelf Science*
- *Marine Ecology Progress Series*
- *Mississippi State University Extension Service*
- *Restoration Ecology*
- *Wetlands*

Grant Reviewer for:

- Gulf of Mexico University Research Collaborative
- NFWS Gulf Coast Conservation Grants Program
- NOAA Gulf Coast Ecosystem Restoration Council
- National Fish and Wildlife Foundation
- Texas Sea Grant

Advisory committees:

2018-present The Strategic Conservation Assessment of Gulf Coast Landscapes project committee for Mississippi and Alabama

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- 2017-present Mobile Bay National Estuary Program's Habitat Restoration Committee for Alabama
- 2017-present Alabama Living Shorelines Advisory Board for NOAA Restore Science Program
- 2017-present Pascagoula River Basin Alliance Board. Mississippi State University representative
- 2017-present Research Lead for the Gulf of Mexico Alliance's Marine Debris team
- 2016-present Mississippi-Alabama Sea Grant Consortium Management Team Member
- 2016-present Member of Mississippi Department of Marine Resources Beneficial Use Group
- 2016- present Member of Mississippi Nature Based Tourism Education and Outreach Subcommittee
- 2016-present Sea Grant Oil Spill Training Program Advisory Committee.
- 2016-present Member of Mobile Bay National Estuary Program's Science Advisory Committee.
- 2016-present Member of Gulf Coast Community Exchange Founding Steering Committee.
- 2015-present Member of Pascagoula, Coastal Streams, and Lower Pearl River Basin Team for Mississippi Department of Environmental Quality
- 2015-present Foundational member and Mississippi State University Extension Service representative on the steering group for the Coastal Mississippi Native Plant Restoration Consortium
- 2015-present Member of Grand Bay National Estuarine Research Reserve Community Collaborative advisory committee
- 2015-present Member of Mississippi Marine Debris Task Force
- 2015-present Member of Habitat Team for the Gulf of Mexico Alliance
- 2015-present Member of Restore Americas Estuaries Mississippi-Alabama Blue Carbon Advisory Team
- 2017-2019 The Nature Conservancy's Resilient Sites for Coastal Conservation in the Southeast and Gulf of Mexico Steering Committee Member
- 2017 Mississippi and Alabama Coastal Ecosystem Services Group Steering Committee. Sponsored by Balmoral Group, The Nature Conservancy, and NASA
- 2017 Tchoutacabouffa River Park Advisory Group, Diberville, MS.
- 2016 Member of Grand Bay National Estuarine Research Reserve NOAA 312 Review Committee

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- 2016 Committee member and partner for NOAA Marine Debris Program led initiative to develop a Gulf-wide response and recovery guide for Marine Debris.
- 2016 Gulf of Mexico Climate Community of Practice Organizational Committee
- 2015-2016 Member of Deer Island Pier Advisory Council appointed by Mississippi Secretary of State
- 2014 Member of Carbon Market Credits and Conservation Benefits committee
- 2014 Member of Ecological Effects of Sea Level Rise in the Northern Gulf of Mexico Management committee
- 2009-2012 Graduate Student Housing Committee Member, Dauphin Island Sea Lab, Dauphin Island, AL

Conference, symposium, meeting, and event committees:

- 2018 Co-chair of "Habitat Management Session" for Bays and Bayous Symposium
- 2018-2019 Co-Chair of the Coastal and Estuarine Research Federation's 2019 Conference in Mobile, AL
- 2018 Session chair for "Ecosystem Restoration as a Tool for Enhancing Resiliency" session at the National Conference on Ecosystem Restoration
- 2016 Co-organizer for event: "Alabama Living Shorelines: An Educational Tour for Decision-Makers."
- 2016 Co-chair of "Habitat Session" for Bays and Bayous Symposium – reviewed 45 abstracts, moderated half-day of session
- 2011-2012 Graduate Student Symposium Planning Committee

Search committees:

- 2017 Search committee chair for Assistant Research Professor of Coastal Avian Ecology position for Mississippi State University Coastal Research and Extension Center and Department of Wildlife, Fisheries, and Aquaculture. Hired: Dr. Mark Woodrey.
- 2016-2017 Search committee for Marine Fisheries Extension position for Mississippi State University Coastal Research and Extension Center and Department of Wildlife, Fisheries, and Aquaculture. Hired: Dr. Marcus Drymon.
- 2016 Search committee for Mississippi State University Coastal Research and Extension Center Department Head. Hired Dr. James Henderson.

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ADVISEES

Graduate Students:

Committee Chair

2016-present Daniel Firth (MS Student), Mississippi State University, Thesis Title: Faunal assemblages associated with living shorelines and implications for high-wave energy ecosystems

2016-present Nigel Temple (PhD Student), Mississippi State University, Dissertation Title: Wave energy effects on fringing marshes: improving the effectiveness of coastal restoration through development and application of low-cost wave gages

Committee Member

2016-present Jamie Amato (PhD Student), The University of South Alabama, Committee Chair: Dr. Just Cebrian, Thesis Title: TBD

2016-present Mollie Nugent (MS Student), The University of Alabama, Committee Chair: Dr. Cherry JA, Thesis Title: Interactive effects of sediment and nitrate subsidies on surface elevation dynamics.

Extension Associates:

2018-present Amanda Jefferson, Mississippi State University and Mississippi-Alabama Sea Grant.

2016-2017 Peter Nguyen, Mississippi State University and Mississippi-Alabama Sea Grant

Extension Program Associates:

2016-present Sara Martin, Mississippi State University

Extension Program Assistants:

2017-present Amanda Sartain, Mississippi State University

Extension Apprentices:

2018 Matthew Virden (Mississippi State University), Mississippi State University Extension Apprenticeship Program

2017 Gillian Palino (University of Florida), Mississippi State University Extension Apprenticeship Program

Interns and intermittent workers:

2018-present Haley Moss, Mississippi State University

2017-present Sarah Cunningham, Mississippi State University

2017-present Gillian Palino, Mississippi State University

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2017-present Ashley McDonald, Mississippi State University

2017-present Andrew Lucore, Mississippi State University

2018 Allison Blanchette, Mississippi State University

2017 Amanda Sartain, Mississippi State University

2016-2017 Emily Fischbach, NOAA/NGI Minority Internship Program and Mississippi State University Extension

2014 Zach Nikolakis, Exxon Mobil Environmental Internship Program

2014 Ali Berry, Exxon Mobil Environmental Internship Program

2013 Josh Hulse, Dauphin Island Sea Lab

2012-2013 Beth Tuttle, Dauphin Island Sea Lab

2012 Maggie Casey, Dauphin Island Sea Lab

2011 Mollie Glover, Dauphin Island Sea Lab

2010 Amy Langston, Dauphin Island Sea Lab

2010 Katherine (Hannah) Phillips, Dauphin Island Sea Lab

2010 Jason Howard, Dauphin Island Sea Lab

2010 Sara Kerner, Dauphin Island Sea Lab

2010 Kellen Watson, Dauphin Island Sea Lab

Technicians:

2010-2011 Sara Kerner, Dauphin Island Sea Lab

2010-2011 Jennifer Hemphill, Dauphin Island Sea Lab

Other mentorship:

2014-2015 Mikel Corporaal, AmeriCorps VISTA

2014-2015 Ryan Wedell, AmeriCorps VISTA

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2013 Diana Montemayor, University of Mar Del Plata, Argentina post-doc

2013 Amanda Hunt, AmeriCorps VISTA

2010 Amanda Pratt (University of Rhode Island), NSF REU